

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application. Accordingly, please cancel claim 3, 4 and 6-8 in their entirety without prejudice nor disclaimer of the subject matter set forth therein. Further, please add new claims 9- 19 as follows:

Listing of Claims

1.-8. (Canceled)

9. (New) A method for manufacturing a semiconductor device, comprising the steps of:

forming a recess in an insulating film on a substrate;

depositing a first conductive film in contact with a bottom and side surface of the recess, the first conductive film comprising a copper alloy including at least one of Al, Si, Ir and Ru;

forming an oxide metal including at least one of Al, Si, Ir and Ru, which is formed by oxidizing a surface portion of the first conductive film;

forming a second conductive film on the first conductive film by an electroplating method so as to fill the recess, the second conductive film including copper; and

forming a wire structure which the first conductive film and the second conductive film are integrated.

10. (New) The method of claim 9, wherein the oxide metal includes no Cu.

11. (New) The method of claim 9, wherein the step of forming the oxide metal includes a sub-step of exposing the surface of the first conductive film to the air.

12. (New) The method of claim 9, wherein the first conductive film includes substantially 1% of Al, by mass, and the oxide metal is an aluminum oxide.

13. (New) The method of claim 9, wherein the first conductive film is formed in a sputtering apparatus,

the second conductive film is formed in a plating apparatus, and

the step of forming oxide metal includes a sub-step of transferring the substrate from the sputtering apparatus to the plating apparatus.

14. (New) The method of claim 9, wherein the step of depositing the first conductive film includes the step of depositing the first conductive film with (111) orientation with respect to the bottom of the recess.

15. (New) The method of claim 9, wherein the second conductive film includes a copper alloy.

16 (New) The method of claim 9, wherein the insulating film includes carbon.

17. (New) The method of claim 9, wherein the step of forming the wire structure includes heating the first conductive film and the second conductive film to form a third conductive film, and thereafter removing the third conductive film out of the recess.

18. (New) The method of claim 9, further comprising a step of exposing the insulating film to nitrogen after forming the recess and before depositing the first conductive film.